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PATENT

Attorney Docket No. 72291

IN THE UNITED STATES PATENT AND TRADEMARK OFFICEApplicants: Bradford L. Farris )  
James J. Fitzgibbon )CERTIFICATE OF MAILING

Appln No.: 09/981,433 )

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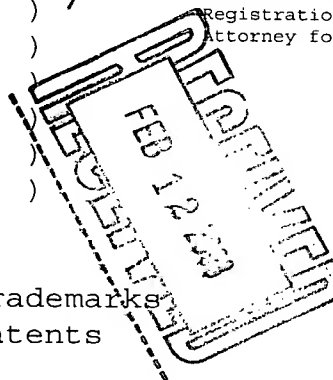
Filed: October 7, 2001 )

For: ROLLING CODE SECURITY )  
SYSTEM )7/3/03 *Kenneth H. Samples*  
Date Kenneth H. Samples  
Registration No. 25,747  
Attorney for Applicants

Group Art

Unit: 2131

Examiner: Not yet assigned )

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Technology Center 2100SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with MPEP §§601 and 609, 37 C.F.R. §1.98(d), the applicants and the undersigned attorney wish to bring the following information to the Examiner's attention in connection with the examination of the above-captioned application.

Applicants respectfully request that the references cited herein and on the attached Form PTO/SB/08A be considered in the present application and listed on the face of any eventuating patent.

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The above items are listed on the Form PTO/SB/08A which accompany this Information Disclosure Statement. The references cited herein are not being submitted along with the Information Disclosure Statement because each has been before the office in prior application no. 08/873,149, (the '149 application), as noted in the Information Disclosure Statement dated April 28, 2000. Applicants will provide the Examiner with copies of the references upon request.

In the '149 application, a translation of foreign patent no. DE 32 34 538 A1 was provided, and information from an electronic database pertaining to patent nos. DE 32 34 539 A1, DE 33 09 802 A1, DE 33 20 721 A1, DE 33 09 802 C2, DE 34 07 469 A1, DE 35 32 156 A1, DE 36 36 822 C1, FR 2 606 232, and FR 2 607 544 was provided. Patent no. EP 0 103 790 corresponds to DE 32 34 538 A1, a translation of which was provided in the '149 application. Patent no. DE 32 44 049 A1 corresponds to GB 2 131 992 A. Patent no. DE 34 07 436 A1 corresponds to EP 0 154 019, and patent no. DE 34 07 469 A1 corresponds to EP 0 155 378. Patent no. DE 35 32 156 A1 corresponds to US 4,723,121, patent 36 36 822 C1 corresponds to US 4,847,614,

patent no. FR 2 606 232 corresponds to US 4,922,533, and ZA 89 08 225 corresponds to US 5,103,221.

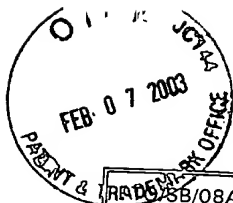
The Commissioner is hereby authorized to charge any additional fees which may be required with respect to this communication to Deposit Account No. 06-1135. This communication is filed in duplicate.

Respectfully submitted,  
FITCH, EVEN, TABIN & FLANNERY

Dated: 2/3/03

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 19

Application Number	09/981,433
Filing Date	October 17, 2001
First Named Inventor	Farris et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket	72291

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup>			
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Sheet 2 of 19

Application Number	09/981,433
Filing Date	October 17, 2001
First Named Inventor	Farris et al.
Art Unit	2131
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Attorney Docket	72291

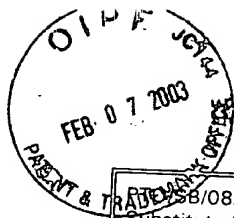
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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet 3 of 19

Application Number	09/981,433
Filing Date	October 17, 2001
First Named Inventor	Farris et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket	72291

## **U.S. PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup>			
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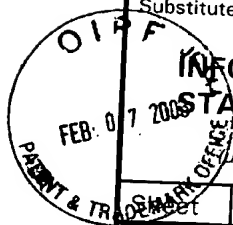
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup>				
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		FR 2 606 232	05-06-1988	Patrick		

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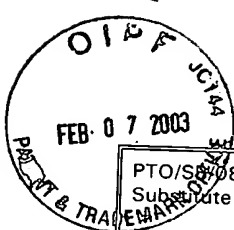
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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet **5** of **19**

Application Number	09/981,433
Filing Date	October 17, 2001
First Named Inventor	Farris et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket	72291

## **U.S. PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup>			
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup>				
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PTO 15708A Institute for Form PTO-1449		Application Number	09/981,433		
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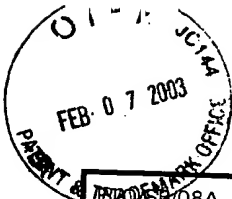
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		US-4,535,333	08-13-1985	Twardowski	
		US-4,574,247	03-04-1986	Jacob	
		US-4,578,530	03-25-1986	Zeidler	
		US-4,581,606	04-08-1986	Mallory	
		US-4,590,470	05-20-1986	Koenig	
		US-4,593,155	06-03-1986	Hawkins	
		US-4,596,898	06-24-1986	Pemmaraju	
		US-4,596,985	06-24-1986	Bongard et al.	
		US-4,599,489	07-08-1986	Cargile	
		US-4,602,357	07-22-1986	Yang et al.	
		US-4,611,198	09-09-1986	Levinson et al.	
		US-4,623,887	11-18-1986	Welle, II	
		US-4,626,848	12-02-1986	Ehlers	
		US-4,628,315	12-09-1986	Douglas	

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Examiner Initials *	Cite No.¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T
		Country Code³-Number⁴-Kind Code⁵				
		WO 93/20538	10-14-1993	Edward		
		WO 94/11829	05-26-1994	Kowalski et al.		
		ZA 89 08 225	06-13-1990			
		ZA 90/4088	05-29-1990			

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.  
<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



INVENTOR'S OFFICE FEB 07 2003		Substitute for Form PTO-1449		Application Number	09/981,433
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Filing Date	October 17, 2001
				First Named Inventor	Farris et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket	72291
Sheet	8	of	19		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		De Soete, Marijke. <i>Some Constructions for Authentication-Secrecy Codes</i> , pp. 57-75, <i>Advances in Cryptology-Eurocrypt 88</i> , (Undated)	
		Diffie, Whitfield and Hellman, Martin E. <i>An RSA Laboratories Technical Note</i> , Version 1.4, (Revised November 1, 1993)	
		Diffie and Hellman, <i>Exhaustive Cryptanalysis Of The NBS Data Encryption Standard</i> , pp. 74-84, <i>Computer</i> , (June 1977)	
		Diffie, Whitfield and Hellman, Martin E. <i>New Directions in Cryptography</i> , pp. 644-654, <i>IEEE, Transactions on Information Theory</i> , Vol. IT-22, No. 6, (November 1976)	
		Diffie, Whitfield and Hellman, Martin E. <i>Privacy and Authentication: An Introduction to Cryptography</i> , pp. 29-33, <i>Proceedings of the IEEE</i> , Vol. 67, No. 3, (March 1979)	
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		Dijkstra, E. W. <i>Hierarchical Ordering of Sequential Processes</i> , pp. 115-138, <i>Acta Informatica</i> 1, (1971)	
		ElGamal, Taher. <i>A Public Key Cryptosystem and a Signature Scheme Based on Discrete Logarithms</i> , pp. 469-472, <i>IEEE, Transactions on Information Theory</i> , Vol. IT-31, No. 4, (July 1985)	
Examiner Signature			Date Considered

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Substitute for Form PTO-1449

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	9	of	19	Examiner Name	Not Yet Assigned
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## U.S. PATENT DOCUMENTS

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup>			
		US-4,630,035	12-16-1986	Stahl et al.	
		US-4,633,247	12-30-1986	Hegeler	
		US-4,638,433	01-20-1987	Schindler	
		US-4,646,080	02-24-1987	Genest et al	
		US-4,652,860	03-24-1987	Weishaupt et al.	
		US-4,670,746	06-02-1987	Taniguchi et al.	
		US-4,686,529	08-11-1987	Kleefeldt	
		US-4,695,839	09-22-1987	Barbu et al.	
		US-4,703,359	10-27-1987	Rumbolt et al.	
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		US-4,716,301	12-29-1987	Willmott et al.	
		US-4,720,860	01-19-1988	Weiss	
		US-4,723,121	02-02-1988	van den Boom et al.	
		US-4,731,575	03-15-1988	Sloan	

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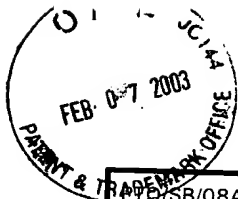
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<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 10 of 19

Application Number 09/681,433

Filing Date October 17, 2001

First Named Inventor Farris et al.

Art Unit 2131

Examiner Name Not Yet Assigned

Attorney Docket 72291

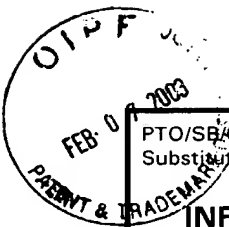
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		ElGamal, Taher. <i>A Subexponential Time Algorithm for Computing Discrete Logarithms</i> , pp. 473-481, IEEE, Transactions on Information Theory, Vol. IT-31, No. 4, (July 1985)	
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		Fenzl, H. and Kliner, A. <i>Electronic Lock System: Convenient and Safe</i> , pp. 150-153, Siemens Components XXI, No. 4, (1987)	
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		Guillou, Louis C. <i>Smart Cards and Conditional Access</i> , pp. 481-489, Proceedings of Eurocrypt, (1984)	

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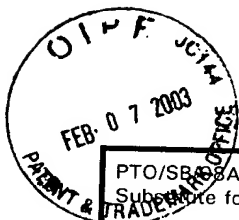
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			Filing Date		October 17, 2001	
			First Named Inventor		Farris et al.	
			Art Unit		2131	
			Examiner Name		Not Yet Assigned	
Sheet	11	of	19	Attorney Docket	72291	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup>			
		US-4,737,770	04-12-1988	Brunius et al.	
		US-4,740,792	04-26-1988	Sagey et al.	
		US-4,750,118	06-07-1988	Heitschel et al.	
		US-4,754,225	06-28-1988	Sanders et al.	
		US-4,755,255	07-05-1988	Pezzolo et al.	
		US-4,758,835	07-19-1988	Rathmann et al.	
		US-4,761,808	08-02-1988	Howard	
		US-4,779,090	10-18-1988	Micznik et al.	
		US-4,794,268	12-27-1988	Nakano et al.	
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		US-4,799,061	01-17-1989	Abraham et al.	
		US-4,800,590	01-24-1989	Vaughn	
		US-4,802,114	01-31-1989	Sogame	

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Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup>					

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<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number	09/681,433
Filing Date	October 17, 2001
First Named Inventor	Farris et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket	72291

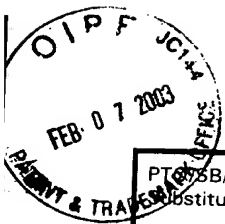
**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

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		Guillou, Louis C. and Quisquater, Jean-Jacques. A Practical Zero-Knowledge Protocol Fitted to Security Microprocessor Minimizing Both Transmission and Memory, pp. 123-128, Advances in Cryptology - Eurocrypt 88, (1988)	
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		Keeloq® Code Hopping Encoder, HCS300, pp. 1-20, 1996 Microchip Technology, Inc.	

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PTO 5B/08A Institute for Form PTO-1449		Application Number	09/981,433		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Filing Date	October 17, 2001		
		First Named Inventor	Farris et al.		
		Art Unit	2131		
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		Keeloq® NTQ 105 Code Hopping Encoder, pp. 1-8, Nanoteq (Pty.) Ltd., (July 1993).	
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		Keeloq® NTQ 125D Code Hopping Decoder, pp. 1-9, Nanoteq (pty.) Ltd., (July 1993).	
		Kent, Stephen T. <i>A Comparison of Some Aspects of Public-Key and Conventional Cryptosystems</i> , pp. 4.3.1-5, ICC '79 Int. Conf. on Communications, Boston, MA, (June 1979).	
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		Kent, Stephen T., <i>Protocol Design Considerations for Network Security</i> , pp. 239-259, Proc. NATO Advanced Study Institute on Interlinking of Computer Networks, (1979).	

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PTO/SA-8A Minute for Form PTO-1449				Application Number	09/981,433
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	October 17, 2001
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				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	14	of	19	Attorney Docket	72291

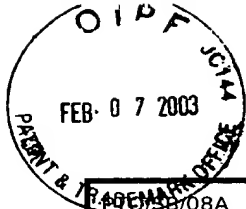
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		Kent, Stephen T., et al. Personal Authorization System for Access Control to the Defense Data Network, pp. 89-93, Conf. Record of Eascon 82 15 <sup>th</sup> Ann Electronics & Aerospace Systems Conf., Washington, D.C. (September 1982)	
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		Lamport, Leslie. <i>The Synchronization of Independent Processes</i> , pp. 15-34, Acta Informatica, Vol. 7, (1976).	

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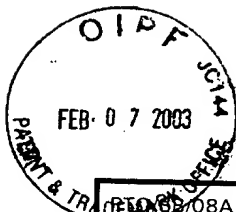
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		Filing Date	October 17, 2001		
		First Named Inventor	Farris et al.		
		Art Unit	2131		
		Examiner Name	Not Yet Assigned		
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		Linn, John and Kent, Stephen T. <i>Electronic Mail Privacy Enhancement</i> , pp. 40-43, American Institute of Aeronautics and Astronautics, Inc. (1986).	
		Lloyd, Sheelagh. <i>Counting Functions Satisfying a Higher Order Strict Avalanche Criterion</i> , pp. 63-74, (1990).	
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		McIvor, Robert. <i>Smart Cards</i> , pp. 152-159, Scientific American, Vol. 253, No. 5, (November 1985)	
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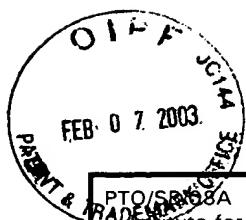
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		Newman, David B., Jr., et al. "Public Key Management for Network Security", pp. 11-16, IEE Network Magazine, 1987.	
		<i>News: Key System for Security</i> , p.38 (April 1982).	
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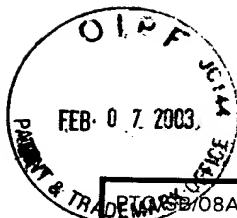
PTO/SRX 088A Substitute for Form PTO-1449		Application Number		09/981,433	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Filing Date		October 17, 2001	
		First Named Inventor		Farris	
		Art Unit		2131	
		Examiner Name		Not Yet Assigned	
Sheet	17	of	19	Attorney Docket	72291

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
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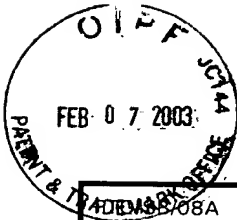


<b>PTO/SB-08A</b> Substitute for Form PTO-1449  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/981,433		
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		Smith, J.L., et al. <i>An Experimental Application of Crptography to a Remotely Accessed Data System</i> , pp. 282-297, Proceedings of hte ACM, (August 1972).	
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		Weissman, C. <i>Security Controls in the ADEPT-50 Time-Sharing System</i> , pp. 119-133, AFIPS Full Joint Computer Conference, (1969).	
		Welsh, Dominic, <i>Codes and Cryptography</i> , pp. 7.0-7.1, (Clarendon Press, 1988).	

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